



Puromycin 2HCl

Data Sheet

Catalog Number:	MC11045	Product Type:	Small Molecule
Bio-Activity:	Translation inhibitor	CAS #:	58-58-2
Research Categories:	Cell death, neuroscience, infectious disease	Chemical Name:	(S)-3'-[[2-amino-3-(4-methoxyphenyl)-1-oxopropyl]amino]-3'-deoxy-N,N-dimethyladenosine dihydrochloride
Solubility:	Soluble in DMSO (up to 50 mg/ml), or in Water (up to 50 mg/ml).	Molecular Formula:	C ₂₂ H ₂₉ N ₇ O ₅ · 2HCl
Purity:	> 98%	Molecular Weight:	544.43
Format:	Powder	Ship Temp:	Ambient
Storage:	-20°C		

Application Notes

Description/Data:

Puromycin is an aminonucleoside antibiotic derived from *Streptomyces alboniger*. It is a protein synthesis inhibitor that disrupts peptide transfer on ribosomes causing premature chain termination [1]. It is an inhibitor of dipeptidyl-peptidase II and cytosolic alanyl aminopeptidase [2]. Puromycin also inhibits protein transport in mitochondria [3].

References:

- 1) Azzam and Algranati; (1973) Mechanism of puromycin action: fate of ribosomes after release of nascent polypeptide chains from polysomes Proc.Nat.Acad.Sci.USA 70 3866
- 2) Bhutani et al. (2007) Puromycin-sensitive aminopeptidase is the major peptidase responsible for digesting polyglutamine sequences by proteasomes during protein degradation EMBO J. 26 1385
- 3) Price and Verner (1993) Puromycin inhibits protein import into mitochondria by interfering with an intramitochondrial ATP-dependent reaction Biochim.Biophys.Acta 1150 89

FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012